

TRANSMITTAL FORM (to be used for all correspondence after initial filing)		Application Number	10/530,972
		Filing Date	April 11, 2005
		First Named Inventor	DeFrees, Shawn
		Art Unit	Unassigned
		Examiner Name	Unassigned
Total Number of Pages in This Submission		Attorney Docket Number	40853-01-5083-US01

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): <ul style="list-style-type: none"> • Return postcard •
Remarks: The Commissioner is authorized to charge any additional fees to Deposit Account 50-0310.		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual	Morgan, Lewis & Bockius LLP Jeffry S. Mann Reg. No. 42,837
Signature	
Date	January 5, 2006

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Typed or printed name	Kathryn A. Degliantoni		
Signature		Date	January 5, 2006

I hereby certify that this correspondence is being deposited with the
United States Postal Service as first class mail in an envelope addressed
to:

PATENT
Attorney Docket No.: 40853-01-5083-US01
Client Ref. No.: NEO00265US

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

On January 5, 2006

MORGAN, LEWIS and BOCKIUS LLP

By: Kathryn A. DeGroot

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Shawn DeFrees, *et al.*

Application No.: 10/530,972

Filed: April 11, 2005

For: ERYTHROPOIETIN:
REMODELING AND
GLYCOCONJUGATION OF
ERYTHROPOIETIN

Customer No.: 43850

Confirmation No.: 2406

Examiner: Not Yet Assigned

Technology Center/Art Unit: Not Yet
Assigned

INFORMATION DISCLOSURE
STATEMENT UNDER 37 CFR §1.97 and
§1.98

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/8A are being called to the attention of the Examiner. In accordance with 37 CFR §1.98(d), copies of the references can be found in Application No. 10/410,945, filed April 9, 2003 (Attorney Docket No. 40853-01-4083-US). It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom..

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no

Appl. No. 10/530,972
IDS

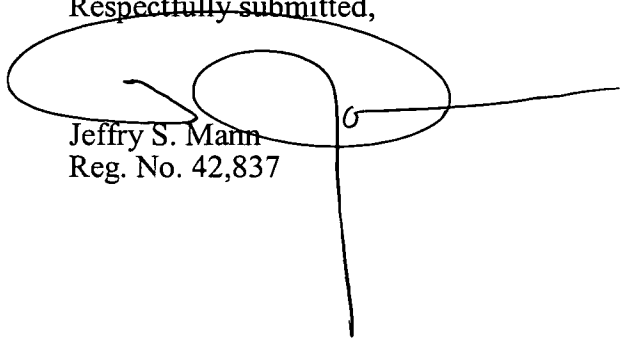
PATENT

representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 50-0310. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-442-1000.

Respectfully submitted,


Jeffrey S. Mann
Reg. No. 42,837

MORGAN, LEWIS & BOCKIUS, LLP
Two Palo Alto Square
3000 El Camino Real, Ste. 700
Palo Alto, CA 94306
Tel. (415) 442-1000
Direct Dial: (415) 442-1119
eFAX: (650) 843-4001
e-mail: jmann@morganlewis.com
ATTACHMENTS

02 JAN 15 11 2:00

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Application Number 10/530,972
Filing Date April 11, 2005
First Named Inventor DeFrees, et al.
Group Art Unit 1646
Examiner Name Not Yet Assigned
Attorney Docket Number 040853-01-5083-US-01

Sheet 1 of 5

U.S. PATENT DOCUMENTS

Exr Initials	U.S. Patent Document		Name of Inventor or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
	Number	Kind Code (if known)		
	2005/0100982 A1		DeFrees, et al.	May 12, 2005
	2002/0137134 A1		Gerngross et al.	Sept. 26, 2002
	4,055,635		Green et al.	Oct. 25, 1977
	4,088,538		Schneider	May 9, 1978
	4,179,337		Davis et al.	Dec. 18, 1979
	4,385,260		Watts et al.	May 24, 1983
	4,412,989		Iwashita et al.	Nov. 1, 1983
	4,414,147		Klibanov	Nov. 8, 1983
	4,496,689		Mitra	Jan. 29, 1985
	4,806,595		Noishiki et al.	Feb. 21, 1989
	4,925,796		Bergh et al.	May 15, 1999
	5,154,924		Friden	Oct. 13, 1992
	5,182,107		Friden	Jan. 26, 1993
	5,352,670		Venot	Oct. 4, 1994
	5,374,541		Wong	Dec. 20, 1994
	5,405,753		Brossmer	April 11, 1995
	5,432,059		Bean	July 11, 1995
	5,527,527		Friden	June 18, 1996
	5,545,553		Gotschlich	Aug. 13, 1996
	5,595,900		Lowe	Jan. 21, 1997
	5,614,184		Sytkowski et al.	Mar. 25, 1997
	5,621,039		Hallahan et al.	April 15, 1997
	5,672,683		Friden et al.	Sept. 30, 1997
	5,716,812		Withers et al.	Feb. 10, 1998
	5,728,554		Bayer et al.	Mar. 17, 1998
	5,833,988		Friden	Nov. 10, 1998
	5,834,251		Maras et al.	Nov. 10, 1998
	5,876,980		DeFrees et al.	Mar. 2, 1999
	5,922,577		DeFrees et al.	July 13, 1999
	5,969,040		Hallahan et al.	Oct. 19, 1999
	5,977,307		Friden	Nov. 2, 1999
	6,015,555		Friden	Jan. 18, 2000
	6,030,815		DeFrees et al.	Feb. 29, 2000
	6,037,452		Minamino et al.	Mar. 14, 2000
	6,166,183		Ishikawa et al.	Dec. 26, 2000

FOREIGN PATENT DOCUMENTS

Exr Initials	Foreign Patent Document			Name of Inventor or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T ₁
	Country Code	Number	Kind Code (if known)			
		WO 01/49830A2		Okkels et al.	July 12, 2001	
		WO 01/60411A1		Kondo	Aug. 23, 2001	
		WO 02/02597A2		Okkels et al.	Jan. 10, 2002	
		WO 02/074806A2		Rasmussen et al.	Sept. 26, 2002	
		WO 02/13843A2		Gabathuler et al.	Feb. 21, 2002	

Examiner
Signature

1-SF/7322844.1

Date
Considered

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TH/

**INFORMATION DISCLOSURE
 STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Application Number	10/530,972
Filing Date	April 11, 2005
First Named Inventor	DeFrees, et al.
Group Art Unit	1646
Examiner Name	Not Yet Assigned
Attorney Docket Number	040853-01-5083-US-01

Sheet 2 of 5

	WO 02/13873A2	Gabathuler et al.	Feb. 21, 2002
	WO 87/00056	Katre et al.	Jan. 15, 1987
	WO 87/05330	Bergh et al.	Sept. 11, 1987
	WO 87/05330A1	Bergh et al.	July 23, 1998
	WO 89/10134A1	Pardridge	Nov. 2, 1989
	WO 90/07572A1	Shak	July 12, 1990
	WO 92/18135	Bednarski et al.	May 15, 1993
	WO 94/05332	M'Timkulu	March 17, 1994
	WO 94/15625A1	Hallahan	July 21, 1994
	WO 95/02421A1	Friden	Jan. 26, 1995
	WO 96/32491	DeFrees et al.	Oct. 17, 1996
	WO 96/40731	Bona et al.	June 6, 1996
	WO 98/31826	Paulson et al.	July 23, 1998
	WO 98/58964	Raju	Dec. 30, 1998
	WO 99/00150A2	Pardridge	Jan. 7, 1999
	WO 99/22764A1	Raju	May 14, 1999

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Exr Initials	Include Name of Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ₁
	Abuchowski et al., 1977, J. Biol. Chem. 252:3582-3586	
	Abuchowski et al., 1984, Cancer Biochem. Biophys. 7:175-186	
	Abuchowski et al., 1997, J. Biol. Chem. 252:3578-3581	
	Ailor et al., 2000, Glycobiology 10:837-847	
	Altmann et al., 1999, Glycoconjugate J. 16:109-123	
	Aplin et al., 1981, CRC Crit Rev. Biochem. 259-306	
	Beauchamp et al., 1983, Anal Biochem. 131:25-33	
	Berger et al., 1988, Blood 71:1641-1647	
	Berg-Fassman et al. 1993, J. Biol. Chem. 268:14861-14866	
	Bhadra et al., 2002, Pharmazie 57:5-29	
	Bhatia et al., 1989, Anal. Biochem. 178:408-413	
	Bickel et al., 2001, Adv. Drug Deliv. Rev. 46:247-279	
	Bijsterbosch et al., 1996, Eur. J. Biochem. 237:344-349	
	Biome et al., 1995, Endocrinology 136:2635-2640	
	Biossel et al., 1993, J. Biol. Chem. 268:15983-15993	
	Boccu et al., 1983, Z. Naturforsch 38C:94-99	
	Bouizar et al., 1986, Eur. J. Biochem. 155:141-147	
	Boyd et al., 1995, Mol. Immunol. 32:1311-1318	
	Browning et al., 1989, J. Immunol. 143:1859-1867	
	Buckman et al., 1981, Makromol. Chem. 182:1379-1384	
	Burns et al., 2002, Blood 99:4400-4405	
	Butnev et al., 1998, Biology of Reproduction 58:458-469	
	Byun et al., 1992, ASAIO Journal M649-M653	
	Casares et al., 2001, Nature Biotech 19:142-147	

Examiner
Signature

1-SF/7322844.1

Date
Considered

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TH/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Application Number	10/530,972
Filing Date	April 11, 2005
First Named Inventor	DeFrees, <i>et al.</i>
Group Art Unit	1646
Examiner Name	Not Yet Assigned
Attorney Docket Number	040853-01-5083-US-01

Sheet 3 of 5

Chaffee et al., 1992, J. Clin. Invest 89:1643-1651	
Charter et al., 2000, Glycobiology 10:1049-1056	
Chern et al., 1991, Eur. J. Biochem. 202:225-229	
Chiba et al., 1995, Biochem J. 308:405-409	
Chrisey et al., 1996, Nucleic Acids Res. 24:3031-3039	
Conradt et al., 1987, J. Biol. Chem. 262:14600-14605	
Crout et al., 1998, Curr. Opin. Chem. Biol. 2:98-111	
Delgado et al., 1992, Critical Reviews in Therapeutic 9:249-304	
Delgado et al., Biotechnol. Appl. Biochem. 12:119-128	
Dunn et al., 1991, Eds. Polymeric Drugs and Drug Delivery Systems, ACS Symposium Series Vol. 469, American Chemical Society, Washington D.C.	
Dwek et al., 1995, J. Anat. 187:279-292	
Eavarone et al., 2000, J. Biomed Mater. Res. 51:10-14	
Fibi et al., 1995, Cells Blood 85:1229-1236	
Fischer et al., 1998, Thrombosis Research 89:147-150	
Flynn et al., 2000, Curr. Opin. Oncol. 12:574-581	
Garnett et al., 2002, Advanced Drug Delivery Reviews 53:171-216	
Gillis et al., 1988, Behring Inst. Mitt. August 83:1-7	
Grodberg et al., 1993, Eur. J. Biochem. 218:597-601	
Hall et al., 2001, Methods in Molecular Biology 166:139-154	
Haneda et al., Carbohydr. Res. 292:61-70	
Hang et al., 2001, J. Am. Chem. Soc. 123:1242-1243	
Harris, 1985, Macromol. Chem. Phys. C25: 325-373	
Hellstrom et al., 2001, Methods in Molecular Biology 166:3-16	
Hermanson et al., 1993, Immobilized Affinity Ligand Techniques, Academic Press	
Hermanson, 1996, Bioconjugate Techniques, Academic Press, San Diego	
Hilles et al., 2002, American Biotechnology Laboratory, 20:30	
Hollister et al., 2001, Glycobiology 11:1-19	
Hounsell et al., 1996, Glycoconj. J. 13:19-26	
Huang et al., 1984, Proc. Natl. Acad. Sci. U.S.A. 81:2708-2712	
Ichikawa et al., 1992, J. Am. Chem. Soc. 114:9283-9298	
Inoue et al., 1995, Biotechnology Annual Review 1:297-313	
Ito et al., 1993, Pure Appl. Chem. 65:753-762	
Jackson et al., 1987, Anal. Biochem. 165:114-127	
Jarvis et al., 1998, Curr. Opin. Biotechnol. 9:528-533	
Joppich et al., 1979, Makromol Chem. 180:1381-1384	
Joshi et al., 1990, J. Biol. Chem. 265:14518-14525	
Jung et al., 1983, Biochem. Biophys. Acta, 761:152-162	
Kalsner et al., 1995, Glycoconj. J. 12:360-370	
Kasina et al., 1998 Bioconjugate Chem., 9:108-117	
Katre et al., 1987, Proc. Natl. Acad. Sci. U.S.A. 84:1487-1491	
Keppler et al., 2001, Glycobiology 11:11R-18R	
Kitamura et al., 1990, Biochem. Biophys. Res. Commun. 28:1387-1394	

Examiner
Signature 1-SF/7322844.1

Date
Considered

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TH/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number		10/530,972	
		Filing Date		April 11, 2005	
		First Named Inventor		DeFrees, <i>et al.</i>	
		Group Art Unit		1646	
		Examiner Name		Not Yet Assigned	
		Attorney Docket Number		040853-01-5083-US-01	
Sheet	4	of	5		

Kitamura et al., 1991, Cancer Res. 51:4310-4315	
Kodama et al., 1993, Tetrahedron Lett. 34:6419-6422	
Koeller et al., 2000, Nature Biotechnology 18: 835-841	
Koide et al., 1983, Biochem Biophys. Res. Commun. 111:659-667	
Kreitmann 2001, Current Pharmaceutical Biotechnology 2:313-325	
Lai et al, 1986, J. Biol. Chem. 261:3116-3121	
Lee et al., 1989, Biochemistry 28:1856-1861	
Li et al., 2002, Trends in Pharmacological Sciences 23:206-209	
Li et al., 2002, Medicinal Research Reviews 22:225-250	
Lord et al., 2001, Clin. Cancer Res. 7:2085-2090	
Lougheed et al., 1999, J. Biol. Chem. 274:37717-37722	
Lucklow et al., 1993, Curr. Opin. Biotechnol 4:564-572	
Lui et al., 2002, 1996, Chem. Eur. J. 2:1359-1362	
Lund et al., 1995, FASEB J. 9:115-119	
Lund et al., 1996, J. Immunol. 157:4963-4969	
Mahal et al., 1997, Science 276:1125-1128	
Maras et al., 2000, Molecular cloning and enzymatic characterization of a Trichoderma reesei , 2- α -D-mannosidase, 77:255-263	
Miller et al., 1993, Curr. Opin. Genet. Dev. 3:97-101	
Min et al., 1996, Endocr. J. 43:585-593	
Mistry et al., 1996, Lancet 348:1555-1559	
Morimoto et al., 1996, Glycoconjugate J. 13:1013-1020	
Nilsson et al., 1984, Methods Enzymol. 104:56-69	
O'Connell et al., 1992, J. Biol. Chem. 267:25010-25018	
Olson et al., 1999, J. Biol. Chem. 274:29889-29896	
Palacpac et al., 1999, PNAS USA 96:4692-4697	
Park et al., 1986, J. Biol Chem. 261:205-210	
Paulson et al., 1997, J. Biol. Chem. 252:8624-8628	
PEG Glucocerebrosidase, Internet page from www.gaucher.org.uk/peg2.prg, printed June 21, 2002	
Poly 1992 (Ethylene Glycol Chemistry:Biotechnical and Biomedical Applications	
Pyatak et al., 1980, Res. Commun. Chem. Pathol Pharmacol 29:113-127	
Rambouille et al., 1999, J. Cell. Biol. 112:3319-3330	
Reff et al., 2002, Cancer Control 9:152-166	
Sadler et al., 1982, Methods in Enzymology 83:458-514	
Saneyoshi et al., 2001, Biology of Reproduction 65:1686-1690	
Saxon et al., 2000, Science 287:2007-2010	
Schwientek et al., 1994, Gene 145:299-303	
Scouten 1987, Methods in Enzymology 135:30-65	
Shah et al., 1996, J. Pharm. Sci. 85:1306-1311	
Singh et al., 1996, Chem. Commun. 1996:993-994	
Song et al., 2002, J. Pharmacol. Exp. Ther. 301:605-610	
Srinivasachar et al., 1989, Biochemistry 28:2501-2509	

Examiner Signature	1-SF/7322844.1	Date Considered	
--------------------	----------------	-----------------	--

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TH/

**INFORMATION DISCLOSURE
 STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Application Number	10/530,972
Filing Date	April 11, 2005
First Named Inventor	DeFrees, <i>et al.</i>
Group Art Unit	1646
Examiner Name	Not Yet Assigned
Attorney Docket Number	040853-01-5083-US-01

Sheet 5 of 5

	Takane et al., 2000, J. Pharmacology and Experimental Therapeutics 294:746-752	
	Takeda et al., 1995, Trends Biochem. Sci. 20:367-371	
	Tanner et al., 1987, Biochim. Biophys. Acta., 906:81-91	
	Taylor et al., 1991, Protein Immobilization Fundamentals and Applications, Manual	
	Thotakura et al., 1987, Meth Enzymol 138: 350-359	
	Tsuboi et al., 2000 Archives of Biochemistry and Biophysics 374:100-106	
	Udenfriend et al., 1995, Ann. Rev. Biochem. 64:563-591	
	Ulloa-Aguirre et al., 1999, Role of Glycosylation in Function of Follicle-Stimulating Hormone, Endocrine 11:205-215	
	Uludag et al., 2002, Biotechnol. Prog. 18:604-611	
	Urdal et al, 1984, J. Chromatog, 296:171-179	
	van Berkel et al., 1996, Biochem J. 319:117-122	
	Veronese et al., 1985, Appl. Biochem. Biotech. 11:141-152	
	Vocadlo et al., 2000, In Carbohydrate Chemistry and Biology, Vol. 2	
	Vyas et al., 2001, Crit. Rev. Ther. Drug Carrier Syst. 18:1-76	
	Wang et al., 1996, Tetrahedron Lett. 37:1975-1978	
	Wang et al., 1996, Tetrahedron Lett. 37:1975-1978	
	Wellhoner et al., 1991, J. Biol. Chem. 226:4309-4314	
	Witte K. et al., 1997, J. Am. Chem. Soc. 119:2114-2118	
	Woghiren et al., 1993, Bioconjugate Chem. 4:314-318	
	Wong et al., 1982, J. Org. Chem. 47:5416-5418	
	Wong et al., 1992, Enzyme Microb. Technol. 14:866-874	
	Woods et al., 1989, Eur. J. Cell. Biol. 50:132-143	
	Wright et al., 1998, J. Immunol. 160:3393-3402	
	Wu et al., 2002, J. Drug targeting 10:239-245	
	Xing et al., 1998, Biochem. J. 336:667-673	
	Yamamoto et al., 1997, Carbohydr. Res. 305:415-422	
	Yamamoto et al., 1998, Carbohydr. Res. 305:415-422	
	Yarema et al., 1998, J. Biol. Chem. 47:31168-31179	
	Yoshida et al., 1999, Glycobiology 9:53-58	
	Zalipsky 1995, Bioconjugate Chem. 6:150-165	
	Zalipsky et al., 1992, Poly (ethylene glycol) Chemistry: Biotechnical and Biomedical Applications 347-370	

Examiner Signature	1-SF/7322844.1 /Thomas Heard/	Date Considered	09/17/2008
--------------------	----------------------------------	-----------------	------------

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TH/